



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,870	02/14/2002	Naoki Okino	219593US3CONT	6350

22850 7590 02/11/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

ROSSI, JESSICA

ART UNIT PAPER NUMBER

1733

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,870

Applicant(s)

OKINO ET AL

Examiner

Jessica L. Rossi

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/27/04 RCE.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-35 is/are pending in the application.
- 4a) Of the above claim(s) 25-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Machine assisted translation.

DETAILED ACTION

RCE

1. The request filed on 12/27/04 for a RCE under 37 CFR 1.114 based on parent Application No. 10/073,870 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Amendment

2. This action is in response to the amendment dated 12/27/04. Claims 1-12 were cancelled. Claims 13-35 are pending.

3. It is noted that the original claims were rejected in the previous office action using US 4708762 to Lenhardt as the primary reference. This reference is not being applied as a primary reference to reject the new claims because although auxiliary suction conveyors 70a and 70b, which are located in both the first and second stages 2a and 2b, move the panes back and forth between the stages by driving the suction means associated with the conveyors (i.e. suction cups, suction belts), the conveyors themselves remain stationary at all times; therefore, Lenhardt fails to teach or suggest pulling the panes to stage 2b by moving the conveyors toward the first stage, affixing the conveyors to the panes, and pulling the conveyors into the second stage.

Election/Restrictions

4. Newly submitted claims 25-32 and 33-35 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

1) Claims 25-32 are directed to a Species that is mutually exclusive from that examined in the previous office action because original claims 1-6 (see claims 1 and 6) were drawn to supporting the first and second glass sheets by sucking portions on the first and second glass

Art Unit: 1733

sheets, as shown in Figure 2, while new claims 25-32 are drawn to supporting the second glass sheet using rollers instead of suction, as shown in Figure 4. Applicant is also invited to read p. 18 of the specification.

2) Claims 33-35 are directed a system/apparatus that can be used to practice another and materially different process such as one for preparing a unit comprising first and second sheets that are not glass (i.e. metal, plastic).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 13-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 13, the specification does not have support for an actuator driven sled, as set forth in line 8. It appears that Applicant is referring to the actuator driven frame 30 (Figure 1 and p. 16, lines 12-20) and therefore should replace "sled" with --frame--.

Art Unit: 1733

Regarding claim 15, the specification does not have support for the rollers extending beyond the faces of the pair of suction boxes facing the glass sheets. According to the specification (p. 14, lines 4-14 and Figure 2), the rollers extend from upper and lower sides of the suction boxes (faces of suction boxes that do not face the glass sheets). Applicant should amend the claim accordingly.

Regarding claim 21, the specification does not have support for applying the resin to a first edge of at least one of the first and second glass sheets. According to the specification, the resin is applied between the edges of the first and second glass sheets (p. 22-23). Therefore, Applicant should amend lines 2, 4, 7 and 9 of the claim accordingly (for example, amend line 2 to state --applying resin between first vertical edges of the first glass sheet and second glass sheet inside the fixed distance gap;--).

Regarding claim 23, the specification only teaches the fixed distance gap in the second stage being equal to the fixed distance gap in the first stage (p. 8-9) and therefore it does not have support for the fixed distance gap in the second stage being "substantially equal" to the fixed distance gap in the first stage.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 13-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1733

Regarding claim 13, it recites the limitation "the first and second glass plates" in line 13. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "plates" to --sheets--.

Regarding claim 16, it recites the limitation "the half" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the" to --a--.

Regarding claim 17, it recites the limitation "the second suction box" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to insert --single-- after "second".

Regarding claim 17, it is unclear what Applicant means by "the first single suction box and the second single suction box have a length greater than a width and are positioned such that a length dimension...". Do the first and second single suction boxes combine to have a length? The width is a width with respect to what? Is length different from a length dimension? Applicant is asked to clarify. It is suggested to amend the claim to state --wherein the first single suction box and the second single suction box each have a length greater than its width and are positioned such that the length...--.

Regarding claim 19, it recites the limitation "the half" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the" to --a--.

Regarding claim 20, it is unclear what Applicant means by "the first single suction box and the second single suction box have a length greater than a width and are positioned such that a length dimension...". Do the first and second single suction boxes combine to have a length? The width is a width with respect to what? Is length different from a length dimension? Applicant is asked to clarify. It is suggested to amend the claim to state --wherein the first

Art Unit: 1733

single suction box and the second single suction box each have a length greater than its width and are positioned such that the length...--.

Regarding claim 22, it is unclear what Applicant means by "a second fixed distance in the gap". Applicant is asked to clarify. It is suggested to change this to --a second fixed distance gap--.

Regarding claim 23, it is unclear what Applicant intends by this claim since the specification only teaches the fixed distance gap in the second stage being equal to the fixed distance gap in the first stage (p. 8-9). Applicant is asked to clarify. It is suggested to delete claim 23 and amend claim 22 to state --using suction force to maintain the fixed distance gap between the first glass sheet and the second glass sheet...--.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 13 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshitaka et al. (JP 10-158041; provided in IDS; abstract and machine assisted translation).

With respect to claim 13, Yoshitaka teaches a method for preparing a double glazing unit by positioning a first glass sheet 31a and a second glass sheet 31b into a first stage movement apparatus (designated by table 4a and conveyor 22a), maintaining a fixed distance gap between the sheets in the first stage with a holder 25 using suction force, moving the glass sheets to a second stage movement apparatus (designated by table 4b and conveyor 22b) using a first driven

Art Unit: 1733

guide 22a located in the first stage, a second driven guide 22b located in the second stage, and a suction chuck 25 located on a actuator driven sled/rail 24, and maintaining with suction the fixed distance gap while the sheets are moved. The reference teaches the moving step including pulling the glass sheets to the second stage by moving the suction chuck toward the first stage, affixing the suction chuck to the sheets via suction, and pulling the suction chuck into the second stage (Figure 4; sections [0019-0026] and [0036] of machine assisted translation).

Please note that present claim language does not exclude the "holder" and "suction chuck" being one and the same.

Regarding claims 21-24, the reference teaches such (Figure 4; section [0034] of machine assisted translation).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshitaka et al. as applied to claim 13 above and further in view of the collective teachings of Lenhardt (US 5051145) and Lenhardt (US 4708762).

Regarding claims 14 and 18, Yoshitaka is silent as to these limitations. It would have been obvious to the skilled artisan to maintain the fixed distance gap between the glass sheets of

Art Unit: 1733

Yoshitaka by replacing the tables 4a and 4b with pairs of suction boxes positioned symmetrically with respect to each other on the faces of both the first and second glass sheets because it is known in the art to position multiple suction boxes on the face of a glass sheet to maintain a fixed distance gap between glass sheets as they move between first and second stages 2a and 2b, as taught by Lenhardt '145 (teaches multiple suction boxes 101 on the face of a glass sheet; Figure 7; column 13, lines 39-60), and it is also known in the art to position a suction box on the faces of both the first and second glass sheets to maintain a fixed distance gap between them as they move between first and second stages 2a and 2b, as taught by Lenhardt '762 (teaches suction boxes 70a and 70b; Figure 3; column 8, lines 4-10; column 11, lines 6-12), wherein only the expected results of maintaining the fixed distance gap would have been achieved.

Regarding claim 15, selection of a particular configuration for the boxes would have been within purview of the skilled artisan especially since both Lenhardt references are not concerned with a particular configuration.

Regarding claims 16 and 19, both Lenhardt references teach such (see Figure 1 in '145 and Figure 11 in '762).

Allowable Subject Matter

14. Claims 17 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

15. Applicant's arguments with respect to claims 13-24 have been considered but are moot in view of the new ground(s) of rejection.


Art Unit: 1733

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on **M-F (8:00-5:30) First Friday Off**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Blaine R. Copenheaver** can be reached on **571-272-1156**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jessica L. Rossi
Art Unit 1733